Forest Health Protection
Pacific Southwest Region

Date: August 25, 2015
File Code: 3400

To: Carolyn Napper, District Ranger, Shasta-McCloud Management Unit

Subject: Trip report following initial site visit to Black Fox Plantations

At the request of Ed Domanski and Craig Sewell, SMMU Silviculture, a site visit was made to the Black Fox Plantations on June 8, 2015, where there is a proposal to treat approximately 350 acres of 30-50 year old plantations. The objectives were to assess the current stand conditions for insect and disease activity and discuss suitability for WBBI funding and 2014 Farm Bill criteria for section 602 categorical exclusion. Ed Domanski, Craig Sewell, Dan Dushey (SMMU), Pete Angwin, and Cynthia Snyder (FHP) were present.

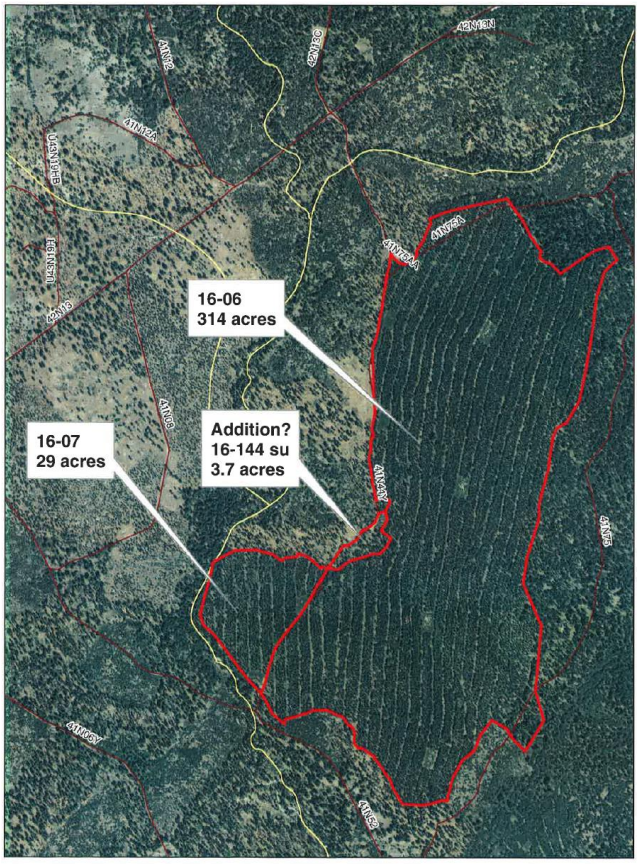

Figure 1. Aerial map of Black Fox Plantations.

Background

The Black Fox Plantations is approximately 569 acres that were windrowed and planted to ponderosa pine (*Pinus ponderosa*) between 1963 and 1987 near Pilgrim Creek Road in the Shasta-McCloud Management Unit, Shasta-Trinity National Forest (T41N, R1W, section 34), approximately 8 miles northeast of the town of McCloud (Figure 1). These plantations lie within the McCloud/Pit River Watershed, designated as a qualifying landscape-scale insect and disease area under section 602 of the 2014 Farm Bill, near the 2014 Pilgrim Project (FHP report #NC14-02) which used the same authorization, "to reduce the risk or extent of, or increase the resilience to, insect or disease infestation in the area(s)".

The Black Fox plantations were pre-commercial thinned in 1975 (no Borax was applied at the time) and certified

NORTHERN CALIFORNIA SHARED SERVICE AREA
3644 AVTECH PARKWAY, REDDING, CA 96002
(530) 226-2437

Cynthia Snyder
clsnyder@fs.fed.us

Pete Angwin
pangwin@fs.fed.us

fully stocked in 1983 with some replanting done around that time. NEPA is anticipated to start in the first quarter of FY2016. This area is designated as Matrix.

Observations

The area of the Black Fox Plantations that we visited was approximately 314 acres with several pockets of ponderosa pine mortality (Figure 2), 3-10 trees each, caused by western pine beetle (*Dendroctonus brevicomis*). Blackstain root disease, caused by the *Leptographium wageneri* pathogen, was found within most of the pockets. This is a

Figure 2. Ponderosa pine mortality, approximately ten trees, representative of much of the pine plantations in the area.

common scenario on the McCloud Flats, especially near the Pilgrim Creek Road, and this set of plantations is very near the Elk Flat Project (FHP report #NC12-04) area described as one of the worst mortality events in recent history on the Flats attributed to the blackstain root disseat/western pine beetle complex.

The current average diameter is 15 inches and basal area ranges 150-250 square feet per acre with white fir (*Abies concolor*) saplings appearing in the understory. The target range for ponderosa pine plantations is 35-55% of max SDI which for these size stands is approximately 80-120 square feet per acre.

Discussion

There are no critical wildlife habitat concerns within the project area, although treatments will occur within ¼ mile of designated critical habitat for the northern spotted owl (dispersal habitat). As with the Pilgrim Project in 2014, it is thought that the treatment will be considered beneficial in terms of reducing the potential for spread of disease to adjacent stands.

The area is at risk of continued western pine beetle-caused mortality in ponderosa pine due primarily to overstocking and the presence of blackstain root disease as in much of the Pilgrim Creek area. As with most bark beetles, the most economical and efficient means of management is to maintain trees and stands in a healthy condition. Stocking reduction and creation of diverse stand conditions reduce overall susceptibility to western pine beetle. Thinning to remove infected hosts and increase sun exposure, thereby heat, to the ground is also recommended to treat blackstain root disease. Thinning was discussed and it was suggested that treatment should bring the SDI down to a level where it would remain below 200 for a minimum of 20 years to meet the Region requirement of no less than 20 year re-entry for thinning. Patch thins would benefit the stands by providing both age class and species diversity by retaining true fir and other species.

If you have any questions regarding this report and/or need additional information, please contact Cynthia Snyder at 530-226-2437 or Pete Angwin at 530-226-2436.

/s/ Cynthia Snyder

CC: Craig Sewell, Ed Domanski, Kathy Roche, Chris Losi, Sheri Smith, Phil Cannon, Chris Fischer, Sherry Hazlehurst, and Pete Angwin